

March 31, 2010

Dear Senator Bayh:

The Town of Pines, near the NIPSCO generating station in Michigan City, is extensively contaminated with radioactive flyash used as roadfill and possibly residential landfill. This presents a substantial health risk for its citizens and others who frequent the town.

I can say this with some authority since I retired from Region 5 U.S. Environmental Protection Agency (USEPA) as the Superfund Radiation Expert and Radiation Risk Assessor. In my 21 years, I was deeply involved in cleanup of a town also contaminated by dispersed radioactive waste.

All coal contains natural radioactivity such as uranium and radium. This is not destroyed by burning so flyash contains the same radioactive materials, but concentrated. When flyash is used as roadfill or landfill the gamma rays emitted can increase the risk of cancer incidence and fatality for those who spend time near it. Other risks may occur from inhalation and ingestion.

At the request of the PINES group I helped them investigate flyash disposal areas in October 2009. A survey meter sensitive to gamma rays and X-rays was used. After determining what the uncontaminated radiation background was, I found that many town areas where a black glittery material was present were up to three times background levels. Levels twice background are statistically distinct from normal levels. Levels above twice background require further investigation, which I recommended to USEPA in my report. So far there has been no USEPA followup on this survey.

The recent draft of the USEPA Superfund Remedial Investigation report identifies this black glittery material as boiler slag, a flyash component. The same report shows the extent of flyash dispersal is even greater than PINES found (see attached Figure 2-3). Moreover, six of ten measurements in the landfill found material exceeding radium cleanup levels consistently used by USEPA Region 5 in radiation cleanups. Assuming the material found in the landfill is flyash and the material used as fill in Pines is flyash, then, consistent with USEPA Region 5 practice, this material is hazardous and should be removed from town areas.

I have also computed the risk for cancer incidence and fatality from exposure to flyash using data collected by USEPA from the Pines landfill. Exposure was assumed for as little as 16 hours per week for the time a person normally lives in one home (30 years). This risk exceeded the upper limit of the range to which Superfund strives to maintain risk, by about ten times.

Therefore, I believe it would be prudent for you to request USEPA Region 5 to make a thorough radiation survey of Pines, making measurements that would allow computation of the risk from all relevant radiation pathways and would determine if the levels exceed USEPA Region 5's traditional radium in soil cleanup levels. If these warrant, flyash removal should proceed.

Larry Jensen

